

class rams. Ram lambs would answer as well as shearlings in this early-maturing breed.

Ontario has been the pioneer Province of Canada in wheat, in dairying, but above all, in live stock. Ontario is the stock farm of Canada as Britain is of the civilized world. There is room for all the breeds of sheep. The sheep business is looking up. The Hampshires are credited with early maturity above all the other breeds. They have the hardiness of their part-progenitors, the Southdowns, and almost the size of the Cotswolds. Specimens of the breed examined by the writer at the Ontario Experimental Farm show a big heavy carcass, good shoulders, well-sprung ribs, quarters well carried out, deep and well set out in the chest, body close to the ground, and pretty heavy bone. The head looks slightly coarse, but chiefly on account of a strong Roman nose, said to have been a mark of the original native Hamp. and Wilts. sheep. It seems to be a tenacious mark of the breed, as it is seen distinctly impressed on the Oxford, though in a modified degree. The above description of points is from the ewes, the Hampshire ram at the College Farm being rather an indifferent specimen of a sheep. It may be that the small number of Hampshires that have come under the writer's observation do not afford sufficient basis on which to form a conclusive estimate. The good points of the ewes are those that properly pertain to good individuals of any breeds, and the ones examined may be above the usual type in form. They certainly look like hearty and gross feeding, meaty sheep, a constant characteristic of the mutton breeds. For the ordinary farmer the Southdown has neither the weight of wool or carcass that will make it the most profitable sheep for him. The extra quality of the Southdown meat does not receive the recognition it should; we cannot have such a degree of discrimination in taste where mutton is not the meat most generally consumed. The Hampshire, on the other hand, has a large carcass and is of excellent quality of mutton, having a large proportion of lean meat. It is this character of fair size and good quality that has given the Shropshire its popularity, and there seems no reason to doubt but that the Hampshires will take an honorable place in the near future among the other breeds. The Hampshire has good ancestry in the Southdown, and is the parent on the maternal side of the Oxford, which already has a wide circle of breeders and admirers. It is time for the Hampshires to have a run. There is no need of controversy on the merits of any breed. All are good, and different men have different tastes, and there is room for twice as many sheep in Canada as we now have. It is sometimes said that sheep cannot be profitably run on land that is worth as much as Ontario land, that it is all right to run sheep on land good for nothing else. Yet England is raising mutton profitably on land worth \$100 an acre. The position that Ontario should expect to take in the sheep industry is that of the producer of fine types of animals of all breeds for distribution to other parts of Canada and to the United States. This means more intensive and succulent feeding, such as is required by the mutton breeds, and it should mean likewise the importation and breeding of such other classes of sheep as have a good reputation in England and have the qualities that would naturally commend them to the Canadian breeder. These are: good size, good quality, hardiness, and early maturity. The importer who has good judgment enough to couple moderation in cost, particularly in ewes selected, with his enterprise should have no difficulty in finding a market for a few Hampshires in Ontario.

The Cause of Saddle Galls.

When a horse has returned to the stable after a long ride he should by no means be unsaddled within from half an hour to an hour after dismounting, or it may tend to the production of saddle galls, which may be very difficult to cure. These galls have their origin in uneven pressure of the saddle, due to faulty construction, from shifting of the saddle when the girths slaken, and not infrequently from bad riding. The reason why the non-removal of the saddle for some time after dismounting acts as a protective against sore backs is well explained by Moller. Where an injury has taken place, the vessels are compressed and almost bloodless. If pressure be now suddenly removed, blood is vigorously forced into the paralyzed vessels, and may thus rupture the walls. On the other hand, if the saddle is allowed to remain some time in position, circulation is gradually restored without injury. The fact that the swelling appears after the removal of the saddle supports this explanation.—*English Live Stock Journal.*

Judges for the Winnipeg Industrial.

Among the judges that have signified their intention of acting at the Industrial at Winnipeg are the following: J. A. Graham, V. S. Claremont, Ont., on Clydes, Shires, Drafts, and General Purpose. M. H. Teneyck, Hamilton, Ont., on Hackneys, Thoroughbreds, and Ponies. Dr. Quinn, V. S., Brampton, Ont., on Standard-breds, Coaches, and Roadsters. Thos. Russell, Exeter, on breeds of beef cattle. G. W. Clemons, St. George, Ont., all breeds of dairy cattle. Jos. Featherston, M. P., Streetsville, Ont., sheep and swine. S. Butterfield, London, poultry. Prof. E. H. Farrington, of Madison Agricultural College, Wisconsin, dairy products.

Pig Feeding and the Toronto Market.

Mr. Wm. Harris, a leading dealer on the Toronto (Ont.) live stock market, reports to us the receipt of a considerable number of hogs which dressed "soft and flabby," a tendency, he believes, due to exclusive corn and grass feeding, a conclusion reached, we presume, on the reports from the buyers of the hogs. Whether the vague reference to grass feeding means that the pigs are supposed to have been fattened on heavy grass or clover and corn alone, or while fattening are allowed the run of a grass lot like an orchard, as is usual in Canada, or whether cut grass, such as alfalfa, is fed them along with grain, no definite information is given. The rational system of allowing a healthful, outdoor run, with a bits of grass, and the privilege of "rooting" while fattening, with a mixed ration, promotes vigorous health, and buyers say that pigs so fed weigh better than those closely confined in pens, indicating, as one would expect, a firmer carcass.

The suggestion is now thrown out by way of warning from the packer that the animals may yet be paid for after slaughter to the wholesale dealer according to grade, or else to cut the price allround. Country buyers inform us that in the past they have sometimes been docked for sending in lots of hogs too fat or over weight. When the packers were clamoring for pigs of certain breeding and paying for all sorts alike, the suggestion was frequently made that the raising of hogs of the bacon type could be encouraged by paying a premium on them, as they were presumably the sort on which the packers were making their handsomest profits. Our Toronto market correspondent, writing on the above subject, says:

"Our bacon products stand at present at the very top by long continued effort of breeding and feeding for quality, but it will lose its prestige if the one-sided system complained of by Mr. Harris is now followed to any extent. It will do no harm to the growing pigs, but they should be finished on pea and barley meal, mixed with millfeed, such as shorts, for quality of meat. It must be remembered that Wiltshire bacon owes its good name to being fed on barley and oatmeal, and the celebrated Waterford brand to potatoes and barley meal."

Remedy for Horn Fly.

In some quarters the horn fly is again reported troublesome to dairy cows and other cattle. An effective remedy consists of seal or fish oil, worth about 80 cents per gallon, and crude carbolic acid, about 25 cents per pint. Mix thoroughly four tablespoonfuls of the acid in one gallon of the oil, and rub on the cattle with a rag once a week. Be careful not to apply too heavily on the hack. It will also kill the warble fly and vermin. Mr. Wm. Rennie, Farm Superintendent at the Ontario Agricultural College, who uses and recommends this treatment, finds it excellent for winter use, also going over the herd thoroughly about three times in the season for vermin and to put the hair and skin in nice handling condition. A gallon of the mixture would do about 30 animals.

FARM.

Points on Harvesting, with Especial Reference to Peas.

To the Editor FARMER'S ADVOCATE:

SIR,—Harvesting operations cannot be two well prepared for, as delays at such a time often cause serious loss. The work should be carefully laid out, looking well ahead so that everything will be in readiness to go on with at the proper time.

It is important that grain be cut while the kernels are soft. When cut at that time wheat turns out a heavier and brighter sample than if allowed to get dead ripe. When land is level and the crops even and clean, there is no advantage in selecting seed from portions of the field, but careful screening and sowing only the heaviest grain should be the rule with all grains and on all farms. Oats will bear cutting quite on the green side without loss, especially when the straw is to be fed. Early cut, well-preserved oat straw is often preferred by stock to even slightly damaged hay.

If it is not desired to feed the pea straw, there is no better way to harvest peas than with the old-fashioned revolving horse rake. If pulled before the crop is dead ripe, they will not be shelled as much as with some of the pea harvesters, and a boy and two men can pull twelve acres in a day. If the straw is to be fed, the pea harvester should be used. It is never wise to stack peas unless one has sufficient lumber to cover the stack tightly. When one has plenty of barn room, they should be drawn in and unloaded with the horse fork. In some neighborhoods where peas are largely grown it is the practice to thresh the crop directly from the field. When neighbors can arrange to do so, this is a very satisfactory way, as the straw is then open and loose, and can be threshed much more rapidly than if they had been stacked or put in a mow. Not only that, but the hauling has only to be done once, and is accomplished very expeditiously when a good force of teams and men are employed. A ten or twenty acre field is in this way cleared in very short order; a bulky, awkward handling crop has been disposed of, and the threshing is done. The threshing machines used have their cylinders run at a lower speed than for other grain; concaves

with less teeth are also used, and in some cases an elm board is used in place of one of the concaves. An ordinary grain separator thus arranged will thresh dry peas fresh from the field very rapidly, and will not crack but very few. A. M. J. Halton Co., Ont.

Cut Grain on the Green Side.

To the Editor FARMER'S ADVOCATE:

SIR,—As to the condition of ripeness at which wheat should be cut, there need be very little doubt to any one who has observed how much plumper and smoother the berry of grain will be cut on what may be called the green side than that which is left to shrink and shrivel up in the straw after the sap has all gone out. I like to cut before the grain gets hard when bitten with the teeth, and while there is sap enough in the straw to mature the grain while it stands in the shade of the stook, and I think what makes the brightest and heaviest grain is the best condition both for milling and for seed.

I have never practiced selecting seed grains from different parts of the field. As a rule, the soil is so similar and the crops grow so uniform in this neighborhood that there is little opportunity to select in that way. However, I am quite particular to grade seed thoroughly when fanning it to sow, and never sow anything but the heaviest samples. What has already been said in regard to wheat applies with equal force to other grains, and especially oats, as I think there is no thrifty farmer who can afford to waste such a valuable by-product as well-cured oat straw. I would, under all circumstances, cut oats just as soon as I think they are matured enough to only shrink slightly while drying in the stook.

As to harvesting peas, in order to save them from shelling and get straw in best condition for feeding, I know of no other way better than a scythe in the hands of a good, willing man, but such an outfit is difficult to place in these days, and so we have pea harvester attachments on our mowing machines, and so cut them with a good deal of waste, but the hogs are turned into the fields for a few days and they find most of the shelled ones. I would not advise stacking peas if it can possibly be avoided, but would haul and put in the barn, where they can be threshed when it is convenient. It is out of the question for an ordinary farmer to be threshing and hauling peas (or any other grain, for that matter) at the same time.

We find the binder, pea harvester, horse fork and slings the principal aids in economical and speedy harvesting. JOHN BURNS. Perth Co., Ont.

Three Rules in Clover Curing.

Though a first-class food may be made from properly cured clover, it may be so improperly cured as to be a worse than useless food. I usually begin cutting when the greater portion of the heads are in bloom, not waiting for them to begin to turn brown, as is so often advised. In the average season this is usually about the middle of June in this district. If the season is late, of course we do not cut so early as that, excepting when a second crop for seed is wanted, then, if the weather permits, even if the heads are not perfectly formed, we begin cutting about June 15th. I always choose sunshiny weather, and begin cutting about four o'clock in the afternoon, and continue cutting until sunset, or until as much hay is cut as can be conveniently raked and put into coils in about one hour. I prefer this time of the day for the cutting, as the clover is at its driest, and the cut clover will not become soaked with dew, as does that which is standing, the upper surface only becoming moistened, and it will begin to wilt long before the standing clover has become dry the next morning. Were it cut while wet, the surface would take much longer drying, the air and heat not being able to reach it.

About noon the next day, if found to be in proper condition, it is shaken out with forks or a tedder, and about three o'clock the rake gets in its work and it is put up into medium sized coils, while the team is ready again at four to cut another strip. This process is continued until all is cut, though on the third or fourth day the hauling begins. After that, no time is lost from the haying, for when not engaged in cutting or curing we are busy storing the cured clover.

I have practiced this method with a three tons to the acre yield in favorable weather, and have always found nice, bright, edible hay. Of course, weather is not always favorable, and a much longer time is required if the weather is cool and cloudy, but if there be prospects of a shower I always try to get it into coils, or at least into windrows, even though it be scarcely ready, preferring to shake it out again on a dry day rather than to allow it to become saturated with rain. For this reason, I never cut hay on Saturday, for if the hay gets dry and then becomes wet with rain or heavy dew, it becomes black and perhaps musty, or if the weather is right it will become too dry, and the leaves will fall off in either case, losing half its feeding value, while two wettings and dryings make it a minus quantity, as far as food is concerned; though if left for manure, it being evenly spread, would be very beneficial. If I were buying hay, I would pay a higher price for well-cured clover than for the best of timothy hay, considering it a much better food for either cattle or horses.